In the claims:

1. (original) A method for specifically detecting chitin and not cellulose in a sample, comprising the steps of:

(a) contacting the sample with a first reagent comprising a chitin-binding domain (CBD) and optionally fused to a maltose-binding domain (MBD); and

(b) detecting specifically whether chitin and not cellulose is present in the sample by the binding of CBD to chitin.

2. (original) A method as recited in claim 1, wherein the CBD in the reagent is conjugated to a reporter.

3. (original) A method as recited in claim 2, wherein the reporter is selected from the group consisting of a radioactive material, a fluorophore, a dye, an electron-dense compound, and an enzyme.

4. (original) A method as recited in claim 1, wherein the sample comprises a plant tissue, an agricultural product, an animal tissue, a human tissue, a contact lens, a prosthetic device, or an air filter.

5. (original) A method as recited in claim 1, wherein the sample comprises an animal body fluid, a human body fluid, a plant fluid, potable water, or a beverage.

6. (original) A method as recited in claim 1, wherein the contacting step additionally comprises contacting the sample with a second reagent comprising an antibody to CBD or an antibody to a protein fused to CBD.

7. (original) A method as recited in claim 6, wherein the first reagent additionally comprises a reporter.

8. (original) A method as recited in claim 7, wherein the reporter is selected from the group consisting of a radioactive material, a fluorophore, a dye, an electron-dense compound, and an enzyme.

9. (original) A method according to claim 1, wherein the CBD has a carbohydrate-binding module corresponding to CBM12.

10. (original) A method according to claim 1, wherein step (a) is preceded by bleaching the sample.

11. (original) A method according to claim 1, wherein the CBD is obtained from chitinase AI from *Bacillus circulans*.

12. (original) A kit, comprising: an immobilized CBD reagent.

13. (original) A kit according to claim 12, further comprising instructions for use of the immobilized CBD reagent for detecting chitin.

14. (original) A kit according to claim 12, further comprising a soluble CBD carrier protein fusion molecule linked to a reporter.

15. (original) A kit according to claim 14, wherein the carrier protein is MBP.

16. (original) A kit according to claim 14, wherein the reporter is a rhodomaine or fluorescein dye.

17. (original) A kit according to claim 13, wherein the CBD is derived from chitinase AI.

18. (withdrawn) A method for detecting chitin in a sample, comprising:

(a) obtaining an immobilized first CBD;

(b) adding the sample and allowing any chitin in the sample to bind to the immobilized CBD;

(c) adding a second CBD for binding the immobilized chitin of step (b) wherein the CBD is optionally linked to a protein carrier and a reporter molecule or to reporter molecule only and wherein the first CBD and the second CBD are obtained from the same or different chitinase; and

(d) detecting the chitin in the sample.

19. (withdrawn) A method according to claim 18, wherein the second CBD is linked to a carrier protein, wherein the carrier protein is MBP.

20. (withdrawn) A method according to claim 19, wherein step (d) further comprises detecting the chitin by means of a labeled antibody.

21. (withdrawn) A method according to claim 19, wherein the first CBD is immobilized by means of a chemical linker.

22. (withdrawn) A method according to claim 19, wherein the first CBD is immobilized on a substrate selected from: a bead, a gel, a filter, a column and a reaction vessel surface.